New Hampshire Department of Agriculture, Markets & Food

PO Box 2042, Concord NH 03302-2042 271-3685 Fax: 271-1109

Manure is Good for Gardens with Careful Use

By Richard Uncles, Supervisor Bureau of Markets

Farmers and gardeners have used animal manure for centuries to fertilize their crops. Ever since primitive agriculturists observed that grass grew thicker and greener around spots where animal manure was deposited, man has known that the nutrients in manure promote plant growth.

As well as providing the essential primary fertilizer elements of nitrogen, phosphorus and potassium, manure provides many of the other trace elements needed by plants in small quantities. Importantly, manure provides organic matter to soil - consisting of small particles of plant and animal residues. Organic matter promotes good soil tilth by improving the existing soil's water and nutrient holding ability, while also benefiting good soil drainage and aeration.

Using manure from animals is fundamentally recycling, and is part of a natural cycle. Grazing animals eat plants, the animal's waste is then returned to the earth, promoting regrowth of plants - a near perfect nutrient circle.

Some basic precautions should be taken when handling manure. Manure naturally is host to a variety of living organisms such as fungi, bacteria and viruses, a few of which are pathogenic – capable of causing illness in humans or animals. Most of these organisms do not survive for long when manure is exposed to the sun and the elements, yet a few can be persistent for some time.

Whether buying manure, either composted in bags or obtaining it direct from a farm, people should be careful when handling the material. Its wise to use gloves when handling manure. Children, who often place their hands in their eyes and mouth, should not be allowed to come into contact with manure.

When using manure, avoid storing or applying it close to wellheads, streams or lakes, or anyplace it could likely runoff in rain storms. The quantity of manure applied should be limited to the fertilizer needs of the particular crop. Just as when using commercial fertilizer, too much manure is worse than too little.

Manure should generally be incorporated into the soil by thoroughly rototilling or hand spading, especially when used on food crops. Its best not to use raw manure unless incorporated into the soil well in advance of planting. If rain or irrigation causes manure to splash onto edible parts of crops, pay special attention to carefully washing the crop before consuming.

Use well-aged or composted manure on growing crops. Do not expect that composted manure will be absolutely free of pathogens. Composting reduces the numbers of many organisms but does not entirely eliminate them. For more information on this topic and others, contact Richard Uncles, Bureau of Markets, NH Dept. of Agriculture, Markets

& Food at tel. 271-3685, email: runcles@agr.state.nh.us or visit the website at www.agriculture.nh.gov.

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